

# EUROPEAN PATENT OFFICE

## Patent Abstracts of Japan

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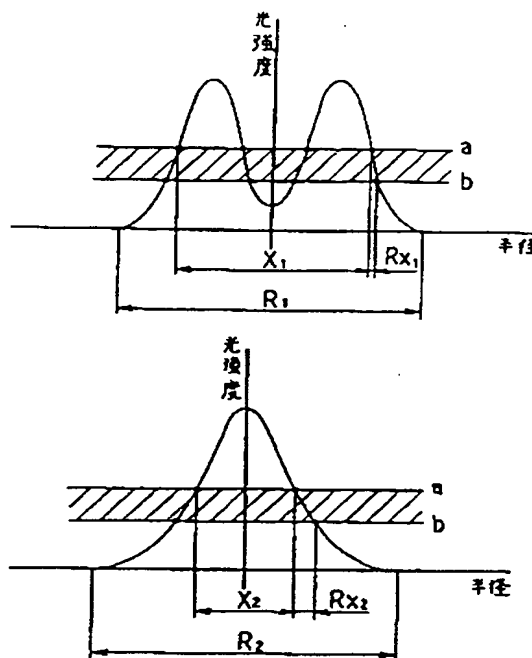
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APPLICANT : MITSUBISHI CORP;

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TITLE : OPTICAL SHAPING METHOD



ABSTRACT : PURPOSE: To efficiently form a comparatively thick belt-shaped solid of desired shape with high dimension accuracy by one scanning by using laser with light amount distribution having a ring large light amount area or a section vertical to the optical axis as irradiation light.

CONSTITUTION: Ring laser is irradiated to a photosetting fluidized substance and scanned at given speed. The set section width ( $X_1$ ) based on the ring laser irradiation is considerably larger than the set section width ( $X_2$ ) of TEM00 model laser irradiation, and therefore, a belt-shaped set section thicker than existing laser having the light amount distribution represented by Gaussian function can be formed with same power consumption. The dimension accuracy of the belt-shaped set section peripheral edge based on laser irradiation is lowered by using a diffused TEM00 model laser, and for instance, a solid of complicated shape cannot be formed. Said defects can be eliminated by using the ring laser to form a solid of complicated shape with high dimension accuracy efficiently.

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